

ous stages. We perform sensitivity analysis in order to understand the attractiveness of various incentive schemes. **RESULTS:** Once antibiotic development has successfully moved past the pre-clinical stages, incentives appear to not have all that much influence on investment decisions. At the pre-clinical stage, however, investment decisions are sensitive to incentives. Out of the incentives assessed, those rewarding success at the pre-clinical stage are the most effective at encouraging pre-clinical development. Incentives given further downstream are less attractive to developers due to the magnitude of upfront expenditure; the time value of money and associated development risks. **CONCLUSIONS:** A decision option approach to the valuation of antibiotics allows for a clear understanding of the value throughout the development cycle and allows us to assess the best structure for incentives aimed at encouraging antibiotic development.

#### PIN103

##### DECONTAMINATION AND INFECTION CONTROL OF NURSING TOOLS AND PATIENT ENVIRONMENT REGARDING NOSOCOMIALIS INFECTIONS

Oláh A<sup>1</sup>, Lukácsics A<sup>1</sup>, Müller Á<sup>1</sup>, Boncz I<sup>1</sup>, Fullér N<sup>1</sup>, Stromájer-Rácz T<sup>1</sup>, Gelencsér E<sup>2</sup>, Szebeni-Kovács G<sup>1</sup>

<sup>1</sup>University of Pécs, Pécs, Hungary, <sup>2</sup>University of Pécs, Kaposvár, Hungary

**OBJECTIVES:** The aim of our examination was to evaluate knowledge of educated nurses on the prevention of infections due to inappropriate decontamination of nursing tools and patient environments and on nosocomialis infections and infection control. **METHODS:** We carried out our cross-sectional, quantitative examination between 1.12.2014 and 28.02.2015 in 12 inpatient wards of a county hospital in Hungary. Our participants were educated nurses (N=103), and for data collection we used two questionnaires: one with only closed-ended questions and one with only open-ended questions. We used Microsoft Office Excel 2002 software to carry out descriptive statistics,  $\chi^2$ -test and two-sample t-test ( $p < 0.05$ ). **RESULTS:** On average, nurses scored higher in case of the questionnaire with closed-ended question than in case of the questionnaire with open-ended questions ( $p = 0.021$ ). Average scores of nurses working at an intensive care ward was significantly higher than nurses working at other wards ( $p < 0.001$ ). Nurses working in health care for longer time find the prevention of nosocomialis infections more important ( $p < 0.05$ ). We found significant difference in case of the preparatory board, the PC keyboard, the patient's bedside table, the telephone and the nurse-bell ( $p < 0.05$ ), unlike in case of the door handle ( $p = 0.081$ ). **CONCLUSIONS:** Knowledge of nurses on nosocomialis infections is not satisfactory at all fields. Nosocomialis infections occur the most often at intensive care wards, thus nurses working at that ward have the most extensive knowledge on the topic. Participants scored higher in case of the closed-ended questionnaire and chose the best answer more easily. Nurses do not consider the infectedness of the patient- or working environment highly important, although the play and important role in transferring nosocomialis infections.

#### PIN104

##### DESCRIPTIVE ANALYSIS OF DRUG UTILIZATION AMONG CHRONIC HEPATITIS C VIRUS (CHC) PATIENTS IN THE US COMMERCIALLY INSURED POPULATION

Puenpatom A<sup>1</sup>, Zhang D<sup>2</sup>, Burrell E<sup>1</sup>, Nwankwo C<sup>3</sup>

<sup>1</sup>Merck & Co., Inc., North Wales, PA, USA, <sup>2</sup>Merck & Co., Inc., West Point, PA, USA, <sup>3</sup>Merck & Co., Inc., Kenilworth, NJ, USA

**OBJECTIVES:** This study described patient characteristics and real world drug utilization among patients diagnosed with CHC in the US. **METHODS:** We conducted a retrospective database study using the Truven Health MarketScan® database. Patients were identified with  $\geq 2$  HCV medical claims (ICD-9: 070.54, 070.44, 070.70, 070.71)  $\geq 1$  month apart (to define chronic illness), and had 3-year continuous enrollment in order to capture treatment experience. The CHC treated cohort was defined as those who had  $\geq 1$  HCV medication filled from 7/1/2013 to 30/6/2014. **RESULTS:** Compared to untreated patients ( $n = 13,953$ ), CHC treated patients (2,558) had a higher prevalence of liver transplants (7% vs 3%,  $p < .0001$ ), cirrhosis (40% vs 20%,  $p < .0001$ ), and comorbidities (Charlson Comorbidity index = 3.9 vs. 3.3,  $p < .0001$ ). Of 2,558 treated CHC patients, patients were treated by SOF/IFN/RBV ( $n = 580$ ), SOF/RBV ( $n = 587$ ), SOF/SMV ( $n = 511$ ), INF/RBV ( $n = 342$ ), BOC/IFN/RBV ( $n = 83$ ), TEL/IFN/RBV ( $n = 162$ ), and other regimens ( $n = 293$ ). Across all the regimens, the mean age ranged from 53-59 years, and majority were male (60%-69%). Among patients receiving SOF/IFN/RBV, SOF/RBV, SOF/SMV, INF/RBV, BOC/IFN/RBV or TEL/IFN/RBV therapy, cirrhosis was observed in 31%, 43%, 55%, 32%, 37%, and 28% respectively ( $p < 0.001$ ). While the majority of patients treated with BOC/IFN/RBV (90%) or INF/RBV (69%) were HCV treatment experienced, only ~10% of patients with SOF-based regimen had prior HCV treatment ( $p < .0001$ ). Patients treated with SOF/SMV had significantly more comorbidities compared to other regimens ( $p < 0.001$ ); 13% of had prior liver transplants compared to 7% of both SOF/RBV and INF/RBV patients and 2% of SOF/IFN/RBV ( $p < .0001$ ). **CONCLUSIONS:** In an insured population, treated CHC patients had higher rates of comorbidities and cirrhosis compared to untreated patients. While the majority of CHC patients with SOF-based regimen were treatment naïve, patients treated with SOF/SMV had higher comorbidities compared to other regimens.

#### PIN105

##### CHARACTERISTICS AND DRUG UTILIZATION AMONG TREATED CHRONIC HEPATITIS C VIRUS (CHC) PATIENTS WITH AND WITHOUT CHRONIC KIDNEY DISEASE (CKD) IN THE US

Puenpatom A<sup>1</sup>, Zhang D<sup>2</sup>, Burrell E<sup>1</sup>, Nwankwo C<sup>3</sup>

<sup>1</sup>Merck & Co., Inc., North Wales, PA, USA, <sup>2</sup>Merck & Co., Inc., West Point, PA, USA, <sup>3</sup>Merck & Co., Inc., Kenilworth, NJ, USA

**OBJECTIVES:** To compare patient characteristics and drug utilization among CHC patients with and without CKD in a US treated CHC population. **METHODS:** De-identified, individual-level healthcare claims data from Truven Health MarketScan® database was analyzed. CHC was defined as those who had  $\geq 2$  medical claims of HCV (ICD9: 070.54, 070.44, 070.70, 070.71)  $\geq 1$  month apart. Three-year continuous enrollment was required in order to capture prior treatment experience. The CHC treated cohort was defined as those who had at least 1 HCV medica-

tion prescribed between July 2013 and June 2014. **RESULTS:** Of 2,558 CHC treated patients, 142 patients (5.6%) were identified as having CKD. The mean age of CHC patients with CKD was 61 years compared to 57 years among those without CKD ( $p < .0001$ ). Compared to CHC patients without CKD ( $n = 2,416$ ), patients with CKD had significantly more comorbidities including diabetes (53% vs 23%,  $p < .0001$ ), major depression (15% vs 6%,  $p = .0007$ ), hypertension (85% vs. 51%,  $p < .0001$ ) and heart failure (19% vs. 2%,  $p < .0001$ ). CHC patients with CKD also had higher prevalence of kidney transplants (11% vs. 1%,  $p < .0001$ ) and more liver transplants (35% vs. 6%,  $p < .0001$ ). For concomitant drug use, CHC patients with CKD had significantly more concomitant drugs (by drug class) during the 2-year baseline period compared to those without CKD (17 vs 11,  $p < .0001$ ). Average annual out-of-pocket pharmacy expenses at baseline were significantly higher among CHC patients with CKD compared to those without CKD (\$1,079 vs. \$606,  $p < .0001$ ). **CONCLUSIONS:** In a US commercially insured population, treated CHC patients with CKD had significantly higher rates of comorbidities and drug utilization compared to those without CKD.

#### PIN106

##### ADHERENCE OF HIV PATIENTS SWITCHING TO EMTRICITABINA+TENOFIVIR DISOPROXIL+RILPIVIRIN. REAL WORLD EVIDENCE FROM ITALIAN ADMINISTRATIVE DATABASES

Degli Esposti L<sup>1</sup>, Sangiorgi D<sup>1</sup>, Buda S<sup>1</sup>, Crovato E<sup>1</sup>, Maggiolo F<sup>2</sup>, Antinori A<sup>3</sup>, Angarano G<sup>4</sup>, Lazzarin A<sup>5</sup>

<sup>1</sup>ClicCon S.r.l., Ravenna, Italy, <sup>2</sup>Az. Osp. Papa Giovanni XXII, Bergamo, Italy, <sup>3</sup>National Institute for Infectious Diseases, Rome, Italy, <sup>4</sup>University of Bari, Policlinic Hospital, Bari, Italy, <sup>5</sup>University Vita-Salute San Raffaele, Milan, Italy

**OBJECTIVES:** To assess adherence in clinical practice of HIV patients switching to emtricitabina+tenofovir disoproxil+rilpivirin. **METHODS:** An observational retrospective cohort analysis, based on administrative databases from four Italian LHUs. The date of the first prescription of emtricitabina+tenofovir disoproxil+rilpivirin between January, 2010 and December, 2013 has been used as the index date. Patients were characterized back in previous 12 months to assess HIV treatments, and followed up after index date for 12 months, date of death, or exiting the database (whatever came first). Non-adherence, as well as selective non-adherence, to antiretroviral medications were calculated using pharmacy refill compliance data in pre/post index date period. Non-adherence measures were expressed in percentages of days spent either without all prescribed antiretrovirals (complete non-adherence) or without at least one of the prescribed regimen components (selective non-adherence) on total days prescribed. **RESULTS:** During the observation period, 87 patients switched to emtricitabina+tenofovir disoproxil+rilpivirin: 10 from Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs), 62 from efavirenz+emtricitabina+tenofovir disoproxil (EFV/TDF/FTC) and 15 from Protease Inhibitors (PIs). Post-switch non-adherence among the 87 patients switching to emtricitabina+tenofovir disoproxil+rilpivirin was around 4%, with small differences according to previous anti-retroviral therapies (4.7% in previously NNRTIs-treated, 4.2% in efavirenz+emtricitabina+tenofovir disoproxil group and 3.2% in patients with previous PIs). For all of them, pre-switch non-adherence showed much higher values: from NNRTIs 20.8% selective non-adherence, 30.5% to all drugs; from EFV/TDF/FTC 10.7%; from PIs 14.2% selective, 25.8% to all. **CONCLUSIONS:** In this preliminary analysis, switching to emtricitabina+tenofovir disoproxil+rilpivirin increased treatment adherence with respect to previous therapies. This phenomenon was highly evident in patients coming from NNRTIs and PIs, who reported an absolute decrease in non-adherence rates of 46.6% and 36.8%, respectively

#### PIN107

##### MINIMUM INDICATORS TO EVALUATE MANAGEMENT AND CLINICAL RESULTS IN INSTITUTIONS ASSISTING PATIENTS LIVING WITH HIV IN COLOMBIA

Acuña L<sup>1</sup>, Sanchez P<sup>2</sup>, Alvis LF<sup>2</sup>, Soler L<sup>3</sup>

<sup>1</sup>Cuenta de Alto Costo, Bogotá, Colombia, <sup>2</sup>Cuenta de Alto Costo, Bogota, Colombia, <sup>3</sup>cuenta de alto costo, bogota, Colombia

**OBJECTIVES:** The aim of this study is to determinate the minimum indicators to evaluate management and clinical results in institutions assisting patients living with HIV in Colombia, between different actors of the Health System. **METHODS:** The Colombian Association of Infectology, health insurance companies, governmental entities, international agencies and professionals leaders in attention of HIV patients were invited in order to have a consensus. Literature research in different databases like PubMed, Embase and Cochrane using Mesh terms was used. 3.023 articles were found. After reading the titles 414 articles were selected, but finally 20 articles were included. Experts reviewed the articles and raised indicators, then all system actors, selected the final indicators. **RESULTS:** 17 indicators were selected and then classified in 4 groups. In the initial evaluation indicators included the proportion of patients with diagnosis of HIV who had attention with expert doctors, patients with report of CD4, patients with viral load and patients with report of Lymphocytes. Monitoring indicators included the proportion of people with annual PPD, people with report of CD4 and viral load in the last 6 month, patients with annual syphilis screening and patients with cardiovascular risk assessment. Therapy indicators included the proportion of pregnant using anti-retroviral agents, patients with antitubercular agents. Furthermore, proportion of HIV people with undetectable viral load in the 48 weeks or more since the beginning of the treatment with antiretroviral agents, and others. Finally, the specific prevention indicators were related with people with latent tuberculosis treatment, prophylaxis for pneumonia by Pneumocystis Jirovecii and a proportion of people with complete vaccination schedule for Hepatitis B. **CONCLUSIONS:** Formulating indicators to institutions assisting patients living with HIV could decrease health inequalities in the attention of this population and will have a positive impact in HIV patients health results.

#### PIN108

##### HOW MUCH IS SPENT IN VACCINES ACROSS WESTERN EUROPE COUNTRIES?

Baron-Papillon F<sup>1</sup>, Ethgen O<sup>2</sup>, Cornier M<sup>1</sup>

<sup>1</sup>Sanofi Pasteur MSD, Lyon, France, <sup>2</sup>University of Liege, Liege, Belgium